

Application No. 10/757,771  
Amendment dated December 28, 2005  
Reply to Office Action of September 29, 2005

PATENT

**REMARKS/ARGUMENTS**

Claims 1-23 were pending in this application. Claims 5, 8, 9 and 20 have been amended. Claims 7, 14-16, 21 and 22 have been canceled. No claims have been added. Hence, claims 1-6, 8-13, 17-20 and 23 remain pending. Reconsideration of the subject application as amended is respectfully requested.

Claims 9-11, 13-14, 17 and 19 stand rejected under 35 U.S.C. § 102(b) as being anticipated by the cited portions of U.S. Patent Publication No. 2001/0019860 to Adachi et al. (hereinafter "Adachi").

Claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Adachi as applied to claims 9-11, 13-14, 17 and 19, and further in view of the cited portions of U.S. Patent Publication No. 2003/0054670 to Wang et al. (hereinafter "Wang").

Claims 15 and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Adachi as applied to claims 9-11, 13-14, 17 and 19, and further in view of the cited portions of U.S. Patent Publication No. 2004/0018699 to Boyd et al. (hereinafter "Boyd").

Claims 20-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Adachi in view of Wang.

Claims 5 and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the cited portions of U.S. Patent No. 5,492,858 to Bose et al. (hereinafter "Bose"), in view of Adachi.

Claims 1-4 have been allowed.

Claims 7 and 8 stand objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

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Claims 5, 8, 9 and 20 have been amended to more particularly recite the Applicants' claimed invention. Specifically, claim 5 has been amended to include allowable subject matter from claim 7. Claim 8 has been amended to change the reference from canceled claim 7 to claim 5. Claim 9 has been amended to include subject matter from claim 16. Claim 20 has been amended to include subject matter from claim 22. No new matter has been added.

#### **Claim Rejections Under 35 U.S.C. § 102(b)**

The Applicants respectfully traverse the rejection of claim 17, since the cited references do not teach all of the claim limitations, either expressly or impliedly. Claim 17 includes "heating the substrate in the presence of nitrous oxide in a furnace to a temperature in the range from about 750° C to about 1000° C" (emphasis added). Adachi does not teach this. The Office Action asserts that this limitation is taught at ¶ 49 of Adachi. At that location, however, Adachi mentions nothing about furnace heating. In fact, nowhere does Adachi teach furnace heating. Claim 17 is, therefore, believed to be allowable, at least for this reason. Claim 23 includes a similar limitation and is believed to be allowable, at least for the same reason.

#### **Claim Rejections Under 35 U.S.C. § 103(a)**

Claim 5 has been amended to include allowable subject matter from claim 7. Claim 5 is, therefore, believed to be allowable, at least for this reason.

Claim 9 has been amended to include subject matter from claim 16. The Office Action does not address claim 16. The subject matter of claim 16, however, was examined at claim 22. In rejecting claim 22, the Office Action cites ¶ 49 of Adachi. At this location, however, Adachi teaches nothing about "heating the substrate . . . to a temperature greater than or equal to 1000° C in a rapid thermal process" as recited in the claim. The range taught by Adachi is not encompassed by the prior art. Hence, the Office Action has not established a case of *prima facie* obviousness, and the Applicants do not have the burden of demonstrating the criticality of the claimed range. Claim 9 is, therefore, believed to be allowable, at least for this

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reason. Claim 20 includes a similar limitation and is believed to be allowable, at least for the same reason.

#### Other Prior Art

Attorney for the Applicants confirms that, according to USPTO records, the cited patents (Gaillard et al., US Patent No. 6,875,558; Geiger et al., US Patent No. 6,733,955; and Herner et al., US Patent No. 6,541,4014) were commonly-owned at the filing date of the present application.

#### Conclusion

In view of the foregoing, Applicants believe all claims now pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 303-571-4000.

Respectfully submitted,



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